

 University of Hertfordshire

### **What is Mine is NOT Yours:**

#### **Further insight on what access-based consumption says about consumers**

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### **Abstract**

This paper presents the findings of a study researching the interaction between modes of consumption which do not involve transfer ownership and consumer culture. These business models are variously termed Access-Based Consumption (ABC), Product Service Systems (PSS) or Eco (efficient) Services and are thought desirable as they offer a promise of sustainability.

The research follows on the steps of Bardhi and Eckhardt's (2012) article in JCR about access-based consumption and investigates that consumption behaviour in the context of maternity equipment. This paper attempts to integrate streams of research on PSS with those of consumer research.

The Authors agree with Bardhi and Eckhardt that users of access based provisions are divided by fear of contagion, negative reciprocity and mistrust of other users, but not that they view environmental benefits of PSS (ABC) as secondary. The brand of the tangible component of a PSS generates trust in consumers and makes them feel they are leveraging their life style.

Adoption of PSS / ABC is constrained by low compatibility with consumer culture. Parents are concerned with the provision's ability to satisfy their needs and what this mode of consumption says about them.

Keywords:

Access-based consumption; Business Model; Compatibility; Consumers; Product Service Systems; PSS; Sustainability;

# **What is Mine is NOT Yours: Further insight on what access-based consumption says about consumers**

## **Introduction**

This paper presents the findings of a study researching the interaction between Access Based Consumption, modes of consumption which do not involve transfer of ownership, and consumer culture. These business models are variously termed Access-Based Consumption (Bardhi and Eckhardt 2012), Product Service Systems, or PSS (Goedkoop, van Halen et al. 1999; Mont 2002; Tukker 2004) or Eco (efficient) Services (Brezet, Bijma et al. 2001; Halme, Jasch et al. 2004). These business models are by some associated with collaborative consumption (Botsman and Rogers 2010) and other sharing consumption habits (Belk 2007) amongst others. All these labels describe a business model, as well as a mode of consumption that does not involve transfer of ownership of goods to consumers. This paper however focuses on business models driven by suppliers; these business models have been dealt with by the design and industrial ecology literature. The issue of acceptability of these business models by consumers is under researched, with only a handful of published studies, e.g. Rexfelt and Hiort af Ornäs (2009) and Catulli (2012). The streams of literature that dealt with these business models, e.g. environmental management, environmental economics and design and engineering have mentioned in passing the issue of compatibility of business models not based on ownership of goods with culture, but no detailed research has been done, apart from a recent study by Bardhi and Eckhardt (2012). That study can be seen as a landmark as it is a key analysis of the reaction of consumers when confronted with access based consumption, using as a context that of car sharing, cars accessed by driver-consumers by the hour, supplied by organizations which were initially driver cooperatives and subsequently acquired commercial identities, e.g. Zip Car (USA) and Mobility Car Sharing (Switzerland). This understanding is desirable because environmentalists and

policy makers have advocated a shift towards an economy based on services, with reduced goods ownership and material consumption (Giarini and Stahel 1993; Stahel 1997; Manzini and Vezzoli 2005) as a possible avenue to reduce environmental damage caused by economic activity, and as a blueprint to a circular economy, i.e. an economy where resources are recovered for reuse or recycle . “Sharing” consumption practices are advocated by consumer researchers, “why own when you can share?” (Belk 2007:137). The diffusion of these practices, however, may be problematic, because access-based consumption could be hindered by social and cultural aspects linked to consumption even more than what suggested by Bardhi and Eckhardt (2012). This paper therefore aims at shedding further light on how consumer practices could embrace access based consumption.

The context of the research is a UK study on a pilot access-based provision of baby and nursery equipment. The paper tries fill up a gap between the theoretical stream of research on eco efficient PSS and other service based business models, and consumer research, extending the work done by Bardhi and Eckhardt (2012). The discussion is relevant to academics and practitioners interested in sustainable modes of consumption. The research was funded by the UK Department of Environment, Food and Rural Affairs (DEFRA).

### **Models of access-based consumption**

Access Based consumption is defined as encompassing

*“Transactions that can be market mediated but where no transfer of ownership takes place”* (Bardhi and Eckhardt 2012:1)

In other words it includes types of provision where the customer acquires an integrated product and service system as a service, for example by renting or leasing products in units of time, so

that the use of the product is shared with other consumers. This type of consumption has been discussed since the late 1980s by parallel streams of literature, e.g. Environmental Management, Industrial Ecology, Sustainability, Ecology and Economics, Design, Engineering and Manufacturing, in particular from authors based in Northern Europe (Baines, Lightfoot et al. 2007). Several definitions have been offered of these business models, and for the purpose of this paper we refer to the concepts of Product Service Systems (PSS), eco-efficient services and integrated solutions.

A PSS is defined as a “*System of products, services, supporting networks and infrastructure that is designed to be: competitive, satisfy customer needs and have a lower environmental impact than traditional business models*” (Mont 2002:239); eco-efficient services are defined as “*services that reduce the material and energy needed to perform an economic activity by replacing products with services*” (Halme, Jasch et al. 2004:126), and finally integrated solutions are “*combinations of products and services that address a customer's unique requirements throughout the life cycle, from development and design to system integration, operations and decommissioning.*” (Brady, Davies et al. 2005:572). What these denominations have all in common, is that they identify an integrated product and service system which consumers can access the use of, *without acquiring ownership of it*. In order to build on existing theory, we use the term PSS in order to offer an articulated taxonomy of this type of provision. PSS can be product oriented, characterized by ownership of products with additional services provided; use oriented, where a service provider provides a function whilst retaining ownership of products; and result oriented, where products are replaced by services (Cook 2004). It is not the tangible product itself that is key to this concept, but the final functionality of PSS (Tukker 2004), very much in line with the conception of marketing proposed by (Vargo and Lusch 2004), who see the

product as merely a support for the provision of a service. These parallel streams of literature have therefore been describing the same phenomenon. Although consumer culture researchers appear to be late in the analysis of these novel business models, they are the first to examine the effect on consumers, and the compatibility with their culture as they confront these types of provision, as for example in Bardhi and Eckhardt (2012).

### **Access Based Consumption and Sustainability**

The reasons for the topicality of the research on access based consumption is that some researchers claim that they represent a more sustainable mode of consumption, e.g. Giarini and Stahel (1993); Stahel (1997); Hawken, Lovins et al. (1999); Mont (2002); Manzini and Vezzoli (2003); Tukker (2004); Manzini and Vezzoli (2005); Mont and Emtairah (2008), and therefore environmentalists and policy makers alike advocate the adoption of access based propositions by consumers. For example, in the case of PSS, it is seen as a speedier route to market for sustainable solutions than radically innovative green technology (Manzini and Vezzoli 2003), it facilitates “take back” schemes, enabling suppliers to manage the responsibility of products during and at the end of their life cycle (Mont 2002), and facilitates compliance with end of life producer responsibility which in the EU is regulated for example by the *Waste Electric and Electronic Equipment (WEEE)* Directive. PSS also supports education towards more sustainable use (Lee, Lu et al. 2007), and leads to improvements in product design (Manzini and Vezzoli 2003) with longer life cycles (Mont 2002); it can offer incentives to the adoption of new innovations such as hybrid technology as in the Zip Car example illustrated by Bardhi and Eckhardt (2012); it supports closed loop industrial systems, can create new market opportunities (Ibid.); and it encourages communication between supplier and customers, leading to improved learning relationships (Ibid.); tangible products used as part of a PSS are withdrawn from the

scheme when damaged, are refurbished or remanufactured, and reused within the scheme until their eventual end of life cycle. PSS also has a potential to enhance businesses' customer retention and market share protection (Mont 2002; Kimita, Shinomura et al. 2009), and as it provides a "pay per use" scheme (Manzini and Vezzoli 2003), it can be concluded that it offers a range of environmental, social and business benefits. These business models are believed to improve resource productivity by between factor 4 and 20 (Cook, Bhamra et al. 2006), although they should be not seen as "panacea" to resolve environmental problems (Mont 2002; Tukker and Tischner 2006).

### **Access based solutions and the consumer market**

Consumer markets have been slower in accepting access-based provision than organizational markets, to the extent that diffusion positively seems problematic. Successful examples include telecommunications providers, as mobile phones are supplied as part of an integrated PSS, as in the recently emerged O<sub>2</sub> network market offers of mobile phones with a leased handset and ICT services such as those based on "cloud" based provision of shared server space, which is changing all the software industry to "software as a service" (Vargo and Lusch 2008).

More problematic is the situation when the product is a more obviously tangible one. In Italy *Ariston*, in collaboration with *ENEL*, a part-privatized energy provider, tested the model by leasing washing machines and charging consumers an integrated fee for usage and energy consumption (Manzini and Vezzoli 2003). This service however did not progress beyond the trial stage. In the case of car sharing services the suppliers are partly responsible for the operation of the system, they withdraw defective or inefficient cars from use and keep a tight maintenance schedule, which helps reducing environmental impacts; other products, e.g. lawnmowers, drills

and other power tools have only in a few cases been offered on access basis to consumer markets, and consumers generally prefer to purchase them outright in spite of at best occasional use.

Bardhi and Eckhardt (2012) offer a first detailed insight on consumers' values and practices when confronted with access based propositions, which reveals further features of consumer attitudes and behavior towards modes of consumption not involving ownership. Consumers do not feel a sense of ownership when using access-based solutions, or identification with these products. On the other hand, users of Streetcar BMW supplied on access basis took pride in driving these luxury cars, which were therefore not used only functionally (Catulli 2012), and this is in line with Belk (2007)'s claim that access-based consumption allows consumers to leverage their life style.

Consumers do not feel affinity with nor trust other users, and need coercive practices and incentives from suppliers to be encouraged to co-create value by cleaning shared cars and refueling them before returning them, as well as handing them back on time (Bardhi and Eckhardt 2012). They also reject attempts by suppliers to be enrolled in brand communities (Ibid.). Other characteristics of access-based consumption are a variety in levels of market mediation, for example tools can be shared informally by neighbors or hired commercially; and type of accessed object (which the Author refers to as "product characteristics") which includes for example whether the product is experiential or functional.

The propensity of consumers to accept access-based consumption seems to be affected by product characteristics, e.g. purchase price, customizability, need for service and maintenance, use intensity, need for "on demand" availability, product size, and level of "product involvement" (Schrader 1999; Littig 2000; Hirschl, Konrad et al. 2002). Some types of products



seem to be seen as more accepted by consumers on an access-based mode. Littig (2000) suggests that different categories of products, e.g. tools, cars, home appliances and media products such as books and videos are accepted by consumers to different extents for three forms of access based consumption, rental, private borrowing and collective use. In the case of cars for example, the lease and rent of cars are accepted and have 0.3% of the USA and 0.4% of some European markets.

Political consumerism is another variable influencing consumer access: consumers might decide to adopt access-based consumption because of desire for positive social or environmental outcomes. Important barriers Bardhi and Eckhardt (2012) identify, in addition to the lack of product identification are a “fear of contagion” from other users and lack of trust that cars are returned in useful time, all giving access a lower status than ownership. These factors were also identified by Catulli (2012) in the form of concerns for hygiene and safety of the tangible product supplied. Consumers do not trust other consumers and also mistrust suppliers such as Zip Car, recently acquired by Avis, and City Car Club (Catulli 2012). Their concerns include specific preoccupation with the performance of the access-based provision, for example service reliability, with the vehicles being available and accessible at the right time, on which consumers have low expectations (Ibid.). They are also concerned with the responsiveness of the supplier to bookings or complaints and with the empathy and helpfulness of service staff (Ibid.).

The Authors of this paper do not entirely agree with Bardhi and Eckhardt (2012)’s claims that consumers fail to develop a sense of ownership and resist attempts to enroll them in brand communities when using products on access-based mode. There are examples that might contradict these claims if investigated, e.g. groups of “aficionados” may lease expensive products such as aircraft or yachts, and share their use. In these particular cases, users may

develop a sense of ownership and in particular they might feel that the product they use defines who they are and what community they belong to, i.e. aircraft pilots or sailors of yachts. This would confirm Belk and Llamas (2012)'s thesis that consumers may feel a sense of ownership over shared products. The next section reviews the importance of ownership of goods in consumer culture, to try and address the problematic diffusion in the market of access-based propositions.

### **Consumer Culture and access-based consumption**

What is the interplay of modes of consumption not based on ownership with consumer culture? Beyond goods' utilitarian meaning, their function to achieve the consumer's objectives (Allen and Ng 1999), i.e. the functional value of products theorized by Vargo and Lusch (2004) in their service dominant logic conception, tangible goods are also culturally meaningful (Arnould 2007). Consumers see their possessions as a legacy to be passed on, as a source of financial security (Wallendorf and Arnould 1988), they accumulate things to have the sense they are building an estate, and this can be seen as a rational attitude to ownership. Consumers however also regard possessions as part of themselves (Belk 1988), ownership is seen as the key culturally universal function of consumption (Wallendorf and Arnould 1988). In today's consumer society consumers are concerned with accumulating and consuming material goods to project an image of status (O'Shaughnessy and O'Shaughnessy 2002). Possession of specific goods and brands is used by consumers to express their social position (Thompson and Troester 2002). An owned house and car, for example, are part of a package of "positional goods" which define social status, image and prestige and which consumers see as helping them climb the social ladder (Rowlands and Gurney 2001) and appear successful (Livette 2006). Young consumers have positive images of home ownership and negative image of rented accommodation; not owning

their home can be perceived by consumers as threatening their status. Gaining ownership of some goods makes consumers feel they “stand out” at the top of the socioeconomic ladder, and they even think they can help them to gain advantages in life and career (Thompson and Haytko 1997). Consumption practices have hedonistic, aesthetic and ritualistic dimensions (Arnould and Thompson 2005; O’Shaughnessy and O’Shaughnessy 2007), and this makes consumers concerned with staying ahead with fashion trends (Thompson and Haytko 1997).

Possession of goods also help consumers express their self-identity (Shouten and McAlexander 1995), for example coming across as macho individualists. This symbolism associated with values of a social category may be linked to the *ownership* or consumption of goods or services by a specific group (Belk 1988), so that the product symbolizes that social group. Ownership of these products then grants consumers acceptance by specific brand communities, for example Harley Davidson owners become members of Harley Ownership Groups (HOG) (Schouten and McAlexander 1995) as do Alfa Romeo owners of their specific clubs (Cova 2012). A sense of belonging to that group is bestowed by ownership of that particular product, so consumers want to gain ownership of it to conform, to fit in socially (Wagler 2009). There is then the issue of product modification, customization and care (Belk 1988), consumers personalize and customize their possessions, such as a house owner developing his house or a “boy racer” making modification to his car, a classic example being Harley Davidson riders turning their motorcycles in “choppers” (Shouten and McAlexander 1995) or the degree of care consumers take of their possessions, e.g. the degree of maintenance consumers perform on their cars.

There is finally an affective dimension. Consumers become attached to their material possessions, to the point that their loss is seen as a tragedy (Wallendorf and Arnould 1988). People become attached to “favorite objects” because these make consumers express themselves

and might be a symbol of interpersonal ties, or they see them vested with memories of experiences they had (Ibid.). It is true that this is not the same across all cultures (Wallendorf and Arnould 1988), but even exponents of other cultures who have settled in a foreign country develop habits of purchasing prestige, expensive brands, in order to communicate status and their social standing in the host culture (Kwak and Sojka 2010). All this affects consumers' attitudes towards goods they use but do not own, as in the case of access-based provision: "People prefer to buy" (Livette 2006:476); it is argued that purchasing ownership is a natural preference on other modes of consumption for some product categories (Livette 2006). The meanings attached to possessions are a key feature of consumer behavior, a natural ways of consuming (Belk 1988). Marketing communications persuade people they need material possessions (Kozinets and Handelman 2004), "you must *have* more to be more" (Kozinets and Handelman 2004:696) – italics by the author). In summary, consumers define themselves by what they own; "*we are what we have*" (Belk 1988:139); italics by the Author). One could therefore expect modes of consumption not based on ownership to clash with consumers' cultural norms and practices.

## **Methodology**

The research methods employed in this study were exploratory, within a constructionist epistemology. Within the context of an Action Research pilot project, consumer research built on:

- Five focus groups where the respondents were mostly expectant women and mothers of young children, 26 women in total, with four men included in two of the focus groups;
- Ten semi-structured in depth interviews of expectant women and mothers of young children.

Both approaches were piloted with an initial focus group and interview, after which the research protocols were slightly modified. Props were used in the focus groups to stimulate discussion.

Focus groups and interviews were recorded and transcribed, the analysis conducted with NVIVO software; neither interviews nor focus groups were filmed as this was found to tense the participants. Ethics clearance was obtained from the University of Hertfordshire's Ethics Board.

### **Findings - Access based proposition of nursery product and consumers**

Our research aimed at investigating how consumers' identities could be represented through confronting them with the access based proposition of a category of products that have strong emotional connotations, baby and nursery products.

Our respondents were very appreciative of accessing the use of top of the range prams, such as Bugaboo and Dorel strollers, *"Bugaboo's and the premium brands you probably do feel quite good pushing that pram thinking, 'Yeah, this is a really good pram for my child,'"*, and felt good about being seen using a fashionable, top of the range product, *"if you've got a Bugaboo which is obviously, you know, people want them, because they're really expensive"*, while at the same time saving money. This seems to suggest that these parents would be open to "leverage" their life style through access based consumption, confirming the thesis of Belk (2007). They would not, however, want people to know that these products are rented, or indeed pre-used, *"Would you then have a brand somewhere of the leasing company on the frame? I think that would put people off"*. So consumers might therefore not be necessarily alienated from a product consumed on access-basis, but they would want to retain the "anonymity" of consumption, confirming claims by Bardhi and Eckhardt (2012). These product brands seem to be an important factor in reassuring consumers that the service would be of high quality, *"if you know*

*that it's coming from one of the reputable brands, you know that this is a proper company that is not going to want anything to go wrong because it's going to jeopardize their reputation so therefore they're going to give you a quality product",* so confirming consumers' concerns about the functional performance that Rexfelt and Hiort af Ornäs (2009), Catulli (2012) and Catulli, Kiri et al. (Forthcoming) identified. Confirming interviews we had with manufacturers, most nursery and baby products, e.g. prams are seen as fashion items, and self-image is a very important satisfaction factor, *"I think you would still be a bit image conscious, you know, if you didn't really want something that looks like it's two models past or, you know, like you are the hundredth person who is using it, it does still need to look quite decent"*.

It appears therefore that consumers really care about brands, both as a reassurance that their needs will be met, and that they are seen by peers in a good light. Consumers are concerned, however, that access – based use of such visible products could carry a stigma, paint the users as irresponsible parents or unable to afford suitable products, *"if I am on the grumpy side then I'd be like 'Oh, she has got a brand new one, I didn't do my best for the baby and I am leasing,' you know?"*, and *"I know a lot of people in our situation where this would have been absolutely perfect for them, because there's just no way beforehand of getting the money and then obviously after you do have the baby you do get your extra child benefit so they'd be able to use that to provide for their child..."*. It appears therefore that consumers might be concerned that revealing their use of such visible products on access might project a negative image of themselves as parents. Confirming Belk (1988)'s and Wallendorf and Arnould (1988)'s claims, there is also an emotional element to ownership, as being attached to their products, *"...you do actually get quite attached to your pram...so if it's possible to kind of purchase it at the end, if that was one of the options that would be quite good"*. Another factor that suggests respondents would be more

likely to buy these products than leasing them or renting them is a preoccupation with getting into commitments requiring regular payments.

However, not all respondents agreed, in fact some felt that being the users of an access-based service would project an image of thrifty, financially smart parents, *“I would feel very smart....”* and *“I’d feel good that I’m saving money, I love a bargain.”*

### **Social responsibility**

A few consumers seemed to be interested in projecting a self-image as a parent with responsibility towards social and environmental causes, *I’d feel good that I was, you know, doing something good for the world, not just putting something into landfill or buying something for the sake of it”; “Yeah, so having a sort of ‘If you do this, you are saving this much resource’, it would interest me ...”*, these parents put this socially responsible identity above other preoccupations, such as the display of status. This appears to contradict the hypothesis of lack of identification consumers feel with access claimed by Bardhi and Eckhardt (2012), and in fact it could open opportunities for access based consumption and PSS. Some users of baby products seem more interested, *“...parents have concerns about the environment, sustainability, recycling, and all those things which, you know, we are aware of and so I would see some added value for the brand if there it was something we were involved in and it was a model that worked for everybody”*. There it was also evidence of some altruistic, socially responsible belief, such as that all parents should be allowed the use of quality products for their children, and this could be facilitated by consumption practices based on access, *“...you see some people with pretty dodgy buggies out there and if that means people can afford a good quality buggy at a really good price then that would be really good, that would be the number one thing”*.

## **Fear of Contamination**

Parenthood is a time of worry and responsibilities for consumers. There is a difference in the practices of first time parents and others, especially so for mothers. These differences were evident in our findings. Being protective of their children means it was expected that they would be concerned about a provision including baby products such as prams which had been pre-used and refurbished, even if professionally. The findings confirmed this expectation, mothers were concerned about hygiene, “... *the cleanliness would be (essential), because I think with my first child, with the cot and the Moses basket, I wanted a brand new one, I think because I was worried about cot death and things like that so, I guess I would have to be really reassured that it was safe*”, and safety, “...*it’s the not knowing the history of it, if it’s been in an accident or something, you know, the safety aspect*”. The hygiene concern was especially relevant to intimate products, e.g. breast pumps and mattresses. Respondents commented that the condition products are in when they received them was a major issue. Respondents said they would want to be reassured on the product’s history, “*So even if I want to go and lease, I want to know the buggy that you are giving me, how old the buggy is, how many people have used it*”.

## **Culture and Practices**

Parents, mums especially, share experiences and practices through various network environments, absorbing information both from experts, for example midwives and health visitors, “*I had really fantastic midwives and that was the kind of stuff that I was also able to ask them as well, they really get a lot of input and said, ‘This is what people use and this is what they think,’ so for me it was definitely the midwives that helped me*” as well as other parents, both from parents groups, “*I’ve got a group of friends who I met through my antenatal classes so we*



*all had our first children at the same time and you're going through everything at exactly the same time, 'My baby's not sleeping, my baby's not doing this, they're doing that,' whatever and you are talking about the products and some of them will be on the internet for hours on end researching things, you're looking at something else and then you all talk about the products and what you've found so that's like my peer group almost", and virtual environments, "Online forums are my favorite place...because mums have most of the things in it, they are the best placed, any question is usually answered under it and people have done their own bit of research, everyone has done this, so all the research comes into one place into pregnancy forums which is a really nice place..."*. Parents and mothers in particular, are information hungry, and these real life and on line resources are a rich venue for sharing of information and practices, this might affect the social acceptability of access-based consumption.

## **Conclusions**

Our findings, based on confronting consumers with an access based proposition of nursery and baby equipment, confirm some of Bardhi and Eckhardt (2012) findings but contradicts some others. We could not see evidence of temporality, probably because this type of product is used by parents for a limited period of time anyway. Parents did not seem concerned with not being the owners of these products, and appearance seems to be more important than essence; one finding that was certainly confirmed was fear of contamination, especially because of the "refurbished", pre-used nature of the products; respondents are very concerned about hygiene and safety. Also confirmed is the character of anonymity of this consumption behaviour, as consumers did not want to be seen as renting or leasing a pre-used pram. Parents look at health practitioners and peers through virtual environments and social networks for information on the practices of parenthood, even more than at their own parents, and it is possible that these sources

would have an influence on how access based provisions would be received. To some extent, it seems that care for the environment could be a factor parents consumers could be interested in, and this is in contrast with Bardhi and Eckhardt (2012)'s findings.

### **Limitations and Directions for Research**

This research compares notes with a prior study on Access Based Consumption, but whilst Bardhi and Eckhardt (2012)'s work deals with an established context – that of successful company Zip Car – our study is based on an “artificial” context, that of a pilot access based provision of nursery and baby products. The research has been conducted in the context of a feasibility study, so whilst the earlier study deals with an established consumption practice, we deal with an expected one;

A second limitation is due to the different contexts in which the case studies were conducted, with Bardhi and Eckhardt's study being based in the USA, whereas the Authors' research has been conducted in the UK. This makes comparison of results problematic due to the differences in culture.

### **Research agenda**

- As the diffusion of access-based consumption and business models such as PSS is desirable because of a promise of sustainability, more investigation is needed on what this type of consumption can reveal about consumer behaviour and culture. This compatibility should be investigated across diverse product categories;
- Research on service driven, access based consumption has been conducted independently by researchers in different disciplines; now it is important that this work converges and a

holistic picture is generated, with consumer researchers dedicating a greater attention to this topic;

- The claim that consumers resist being involved in communities associated with the brand they utilize as an access-based solution also needs to be investigated, as the Authors feels this claim can be disputed.

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